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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,843	04/27/2001	Claudiu D. Pruteanu	20010142.ORI	2768

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EXAMINER	
KEENAN, JAMES W	

ART UNIT	PAPER NUMBER
3652	

DATE MAILED: 09/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/844,843	PRUTEANU ET AL.
	Examiner	Art Unit
	James Keenan	3652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 June 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *51-53,55-57 and 59-64* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *51-53,55-57 and 59-64* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 51-53, 55-57, and 59-64 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 63, line 4, the term "optionally" is not understood and renders the scope of the claim ambiguous.

In claim 64, lines 4-5, it is not understood what is meant by "and laterally therefrom any distance".

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 64 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brandt ((US 5,851,100) in view of McNeilus et al (US 5,833,429), both of record.

Brandt, as noted previously in paper #15, shows the invention essentially as claimed, particularly a pivoting arm lift and dump arrangement including boom 24, double acting hydraulic linear actuator 68, one-piece arm 26, mounting shaft 74, grabber device 28, and various sensors, actuators, and controls as claimed.

Brandt does not show the arm curved to reduce the lift and dump radius.

McNeilus et al, as also noted in paper #15, show a similar invention assigned to the same assignee as Brandt, including several embodiments of pivoting arms, some of which (figures 12-15) are virtually identical to that of Brandt, and others (figures 5 and 8) which have a curved or bent structure.

It would have been obvious for one of ordinary skill in the art at the time of the invention to have modified the apparatus of Brandt by utilizing a bent or curved arm structure, as shown by McNeilus et al, as this is shown to be an alternate equivalent arm structure in the same environment, and would at least to some extent reduce the lift and dump radius.

5. Claim 59 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brandt in view of McNeilus et al, as applied to claim 64 above, and further in view of Duell et al (US 6,123,497) and Tordenmalm et al (US 4,896,582), both of record.

As noted in paper #15, Brandt does not show a control means to damp the action of the hydraulic cylinder toward the extremes of travel thereof, while Duell et al show a mechanically "cushioned" hydraulic cylinder in a similar refuse collection vehicle and Tordenmalm et al show a control system including sensing and braking means for damping a piston as it approaches the end position of travel within a hydraulic cylinder.

It would have been obvious for one of ordinary skill in the art at the time of the invention to have modified the apparatus of Brandt by utilizing a control means for damping the action of the cylinder, as suggested by the combined teachings of Duell et

al and Tordenmalm et al, as this would simply be a well known expediency in the art for reducing shock and damage to a piston/cylinder assembly.

6. Claims 51, 55, 56, 60, 61, and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brandt in view of McNeilus et al and Sizemore et al (US 5,505,576), of record.

The apparatus of Brandt even as modified by McNeilus et al does not show a hydraulic rotary actuator as the means for pivoting the arm relative to the boom.

Sizemore et al, as noted in paper #15, show a refuse collection vehicle with rotary actuator 49 which rotates lift arm 18.

It would have been obvious for one of ordinary skill in the art at the time of the invention to have further modified the apparatus of Brandt and McNeilus et al by substituting the arm hydraulic cylinder with a rotary actuator, as Sizemore et al show this to be a well known and art recognized expediency for pivoting a lift arm, the use of which in the apparatus of Brandt would require no undue experimentation and produce no unexpected results.

Re claims 51, 55, and 56, note paragraph 5 of paper #15.

7. Claims 52, 53, 57, and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brandt in view of McNeilus et al and Sizemore et al, as applied to claims 63, etc. above, and further in view of Duell et al.

As noted in paper #15, Brandt as modified does not disclose controlling the speed of the arm based on the sensed position thereof.

Duell et al, as also noted previously, shows that controlling the rotational speed of a dumping arm 26 can be at least to some extent based on the output of an arm position sensor AP_1.

It would have been obvious for one of ordinary skill in the art at the time of the invention to have further modified the apparatus of Brandt by controlling the rotational speed of the arm based on the arm position sensor, as suggested by Duell et al, as this would provide greater efficiency and flexibility when operating in the automatic mode.

8. Applicant's arguments filed 6/02/04 have been fully considered but they are not persuasive.

Applicant argues that the Brandt and McNeilus references show compound arm structures rather than a one-piece curved arm. However, the portions 24, 100 of the arm structures of Brandt and McNeilus, respectively, which are attached to the vehicle are analogous to applicant's claimed boom. The respective portions 26, 104 of the arm structures are one-piece and are analogous to applicant's arm structure. Nothing in applicant's claim precludes such an interpretation.

Applicant argues that the various tertiary references are not properly combinable and thus do not suggest the obviousness as set forth in the rejection. However, as noted previously, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it

that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Keenan whose telephone number is 703-308-2559. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on 703-308-3248. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James Keenan
Primary Examiner
Art Unit 3652

jwk
48/26/04